

## **AMENDMENTS TO THE SPECIFICATION**

### **Please replace paragraph [0001] as follows:**

**[0001]** The subject matter of this application is related to the subject matter in a co-pending non-provisional application by the same inventors as the instant application entitled, "Dynamically Configuring Selected Methods for Instrument-Based Profiling at Application Run-Time," having serial number ~~TO BE ASSIGNED~~10/654,522, and filing date ~~TO BE ASSIGNED~~09 February, 2003 (Attorney Docket No. SUN-P9153-SPL).

### **Please replace paragraph [0006] as follows:**

**[0006]** When we consider programs executed on top of a virtual machine (VM), as it is the case with the JAVA™ platform, we have to mention another alternative to code instrumentation: VM-generated events, or "VM hooks." The VM itself can be instrumented to generate events such as method entry/exit, object allocation, monitor enter, etc. This is done essentially by placing calls to user-suppliable functions in the relevant places in the VM code, for example in the interpreter code executed upon method entry. Some events that are important when profiling a Java application, for example a garbage collection event, cannot be generated using bytecode instrumentation at all. However, for most of the other events, in particular for method entry/exit and object allocation, it has been found over time that their support inside a JVM complicates the latter, sometimes requiring a significant effort from developers, and at run time may cost more than equivalent bytecode instrumentation. This is true at least for VMs intended to be used for general-purpose desktop and server applications, in contrast with those used in cell phones and smaller devices. As a result, it has been recently decided by the expert group established to define a new JVM profiling API, that in the forthcoming specification, many of the VM-generated events, including method entry/exit and object allocation, will be optional and not required to be supported

by all conforming JVMs (see JSR 163—Java Platform Profiling Architecture, <http://www.jcp.org/jsr/detail/163.jsp>, 2002). Bytecode instrumentation is the recommended mechanism for their generation.